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## INVITED COMMENTARY

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Dr Vouyouka and colleagues are to be commended for their important contribution to the literature entitled: "Lessons learned from the analysis of gender effect on risk factors and procedural

outcomes of lower extremity peripheral arterial disease". The influence of gender on peripheral arterial disease (PAD) is not well studied and is not well defined in the current literature. Unfortu-

nately, women have been excluded from clinical trials due to the confounding factors such as hormonal influences, and Dr Vouyouka's analysis of a large administrative data set emphasizes gender-related disparities that exist in the care of patients with atherosclerotic vascular disease. This is truly a tragedy, as it is well known that PAD is a surrogate marker for systemic vascular disease. Besides having an elevated risk of severe atherothrombotic vascular events such as stroke, heart disease, and limb loss, patients with PAD also experience a resultant decrease in quality of life and increased cardiovascular morbidity and mortality.<sup>1-3</sup> Despite the magnitude of this health problem, screening and treatment rates in high-risk populations are inappropriately low, particularly for women. Aggressive screening programs to detect atherosclerosis have been advocated as well as aggressive risk factor management in women with asymptomatic disease.<sup>4</sup> Primary prevention measures can be instituted once an estimate of absolute cardiovascular risk is known.

Furthermore, as Dr Vouyouka indicates in the discussion section, many health care providers do not address cardiovascular disease or risk factors with their female patients, and sometimes are not aware of gender differences in symptoms, symptom reporting, and differing patient beliefs and attitudes. The authors clearly conclude from this data analysis that "aggressive modification of risk factors . . . may improve gender-related disparity in the outcomes of vascular disease". However, in order for this to take place,

the risk factor must be recognized through thorough history taking or evaluation. The burden is upon the medical profession to identify women and men prior to the onset of symptoms or limb-threatening disease, or even the onset of coronary or cerebrovascular symptoms. We must recognize women as having equivalent risks of atherosclerotic disease as men and proceed with testing women to avoid misdiagnosis. We also need to identify societal obstacles that promote isolation and prevent women from seeking evaluation and work to circumvent these obstacles. This article is an important one that should be read by physicians of numerous specialties.

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